RED'KO, G.I. [Red'ko, H.I.], RED'KO, G.F. [Red'ko, H.F.]

Dynamics of height growth in poplars during the vegetative period. (Ukr. bot. zhur. 21 no.6:25-31 '64. (MIRA 18:2)

1. Polis'ka agrolisomeliorativna doslidna stantsiya, sel. Pershotravneve Ovruts'kogo r-nu.

REB'KO, G. I., Cand of Agric Sci -- (diss) "Raising Poplars in the Forest Steppe of the Ukrainian SSR," Khar'kov, 1959, 30 pp (Khar'kov Agricultural Institute im V. V. Dokuchayev) (KL, 2-60, 115)

COUNTRY	:	USSR
CATEGORY	:	Forestry. Forest Biology and Typology K
ABS. JOUR.		RZhBiol., No. 2,1959, No. 6141
AUTHOR	:	Red'ko, G.I.
INST.	:	AS UkrSSR
TITLE	:	Influence of the Black Alder (Alnus glutinosa Gaertn) on the Productivity of the Cottonwood (Populus canadensis Moench.).
ORIG. PUB.	:	Dopovidi AN URSR, 1958, No.3, 343-346
ABSTRACT	:	By observations of 9 - 90 year-old plants of P. canadensis in Poltavskaya and Sumskaya Oblasts it was established that the extent of nearness of the black alder to the cottonwood determined ... ification of diameter, height, and ... Their roots went far into the depth of the ... tree stands of alders and by suctor- ... penetrated into the nitrogen-rich protuberances on the roots of the alders, thus assisting nutrition by means of this additional nitrogen. -- L.V. Vasmelov
Card:		1/1

RED'KO, G.I. [Red'ko, H.I.], RED'KO, G.F. [Red'ko, H.F.]

Dynamics of height growth in poplars during the vegetative period. Ukr. bot. zhur. 21 no.6:25-31 '64. (MIRA 18:2)

1. Polis'ka agrolisomeliorativna doslidna stantsiya, sel. Pershotravneve Ovruts'kogo r-nu.

RED'KO, G.I.

Effect of black alder (Alnus glutinosa geertn) on the production of cottonwood (Populus canadensis Mnch) [with summary in English]. Dop. AN URSR no.3:343-346 '58. (MIRA 11:5)

1.Viddil ekologii roslin biologichnikh nauk. Predstavleno akademikom AN USSR P.S. Pogrebnyakom [P.S. Pohrebniakom].
(Alder) (Cottonwood)

REB'KO, G.S.; RADIN, V.V.; RATNER, R.Ya.; Prinimali uchastiye: ANOSOVA, O.T.; IVANOV, M.I.; PETROVA, V.A.

Causes for the growth of grog materials during their firing. Ogneupory 30 no.8:1-6 '65. (MIRA 18:8)

1. Borovichskiy kombinat ogneuporov.

KONAREV, M.U.; RED'KO, G.S.; RADIN, V.V.

Using Kirovograd clay at the Borovichi Refractories Combine. Ogneupory 29 no.11:495-496 '64. (MIRA 18:1)

1. Borovichskiy kombinat ogneuporov.

SVINARENKO, D.M; LUGOVSKIY, S.I.; RED'KO, I.A.; SEMENKO, P.I.

Progressive work practices in the Nevaia iron ore mine. Gor.zhur. no.10:12-18 O '55. (MLRA 9:2)
(Krivoy Rog--Iron mines and mining)

RED'KO, I.A., gornyy inzhener.

Remote control determination of carbon monoxide concentrations in dead end stopes. Gor.zhur. no.11:53 N '55. (MLRA 9:1)
(Mine gases)

LUGOVSKIY, S.I., kandidat tekhnicheskikh nauk, dotsent; RED'KO, I.A., gornyy inzhener

Sudden gas generation when drawing cut ore. Gor.zhur. no.6:59-62 Je '55. (Mine gases) (Mining engineering-- Safety measures) (MLRA 8:8)

15-57-10-14974

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10, p 276 (USSR)

AUTHORS: Lugovskiy, S. I., Red'ko, I. A.

TITLE: The Effect of Explosive Operations in Open Pits on Gas Contamination in Subsurface Mine Workings (Vliyaniye vzryvnykh rabot v kar'yere na zagazovannost' podzemnykh vyrabotok shakhty)

PERIODICAL: Sb. tr. Krivorozhsk. gornorudn. in-t, 1956, Nr 5, pp 59-65

ABSTRACT: During simultaneous use of open-pit and subsurface methods of ore extraction and during subsurface mine operations coupled with open-pit work in which explosives are used for blasting, there is possible danger from gas contamination in the mine when the ventilators of the mine work by suction. The author describes instances in two mines of the Krivoy Rog basin where gas has fouled the air in subsurface

Card 1/2

LUGOVSKIY, S.I., professor, doktor tekhnicheskikh nauk; SEMENKO, P.I., gornyy inzhener; REDʹKO, I.A., gornyy inzhener.

Rapid major repairs of reinforced shaft linings. Gor. zhur. no.7: 54-56 Jl '57. (MLRA 10:8)

(Shaft sinking)
(Mine timbering--Maintenance and repair)

KHIVRENKO, A.F., inzh.; RED'KO, I.A.

Improving the ventilation of Krivoi Rog Basin mines. Bezop.truda v prom. 2 no.10:11-13 O '58. (MIRA 11:11)

1. Trest Dzerzhinskruda.
(Krivoi Rog Basin— Mine ventilation)

SOV-127-58-8-6/27

AUTHORS: Lugovskiy, S.I., Doctor of Technical Sciences, Professor, Khivrenko, A.F. and Redko, I.A., Mining Engineers

TITLE: The Reconstruction of the Inclined Shaft of the Mine Imeni Kirov (Rekonstruktsiya naklonnogo stvola shakhty im. Kirova)

PERIODICAL: Gornyy zhurnal, 1958, Nr 8, pp 35-37 (USSR)

ABSTRACT: The authors describe the reconstruction of installations in the inclined shaft in the mine imeni Kirov. This was necessitated by the deepening of the shaft from 326 m to 400 m. There are 2 diagrams and 1 photo.

ASSOCIATION: Krivorozhskiy gornorudnyy institut (The Krivoy Rog Ore-Mining Institute)

1. Mines--Operation 2. Mining engineering

Card 1/1

BONDARENKO, I.I., ZHUKOV, M.N.; ZINCHEVSKIY, N.P.; RED'KO, I.A.; SEMENKO, P.I.; SVINARENKO, D.M.; KHIVRENKO, A.F.; SHKUTA, E.I.; SHOSTAK, A.G.

Review of "Ventilation of mines after large-scale blasting" by S.I.Lugovskoi. Reviewed by I.I.Bondarenko and others. Bezop.truda v prom. 3 no.8:38 Ag '59. (MIRA 12:11)

1. Glavnyy inzhener upravleniya Krivorozhskogo okruga Gosgortekhnadzora USSR (for Bondarenko). 2. Glavnyy inzhener instituta Krivbassproyekt (for Zhukov). 3. Glavnyy inzhener rudoupravleniya im. Karla Libknethta (for Zinchevskiy). 4. Nachal'nik otdela kapital'nogo stroitel'stva rudoupravleniya im. Dzerzhinskogo (for Ryng). 5. Nachal'nik ventilyatsii tresta Dzerzhinskruda (for Red'ko). 6. Upravlyayushchiy rudoupravleniyem im. Dzerzhinskogo (for Svinarenko). 7. Upravlyayushchiy upravleniyem im. Karla Libknekhta (for Semenko). 8. Glavnyy inzhener tresta Dzerzhinskruda (for Khivrenko). 9. Glavnyy inzhener rudoupravleniya im. Dzerzhinskogo (for Shkura). 10. Nachal'nik tekhnicheskogo otdela tresta Dzerzhinskruda (for Shostak).
(Bibliography--Industrial safety) (Lugovskoi, S.I.)

LUGOVSKIY, S.I., doktor tekhn.nauk; KHIVRENKO, A.F., inzh.; RED'KO, I.A., inzh.

Rapid completion of levels in the Krivoy Rog iron ore basin. Biul. TSIICHM no.10:12-17 '60. (MIRA 15:4)
(Krivoy Rog Basin--Iron mines and mining)

RED'KO, I.A., inzh.; KHIVRENKO, A.F., inzh.

Accident in the TSentral'naia Mine. Bezop.truda v prom. 6 no.2:12-13 F '62. (MIRA 15:2)

1. Trest Dzerzhinskruda, g. Krivoy Rog.
(Krivoi Rog Basin--Mine accidents)

RED'KO, I. A., inzh.

Reducing general mine depression. Bezop. truda v prom. 6 no.9: 19-20 S '62. (MIRA 16:4)

1. Dzerzhinskiy gosudarstvennyy trest zhelezorudnoy promyshlennosti.

(Krivoi Rog Basin—Iron mines and mining)

[illegible]Y, [illegible], prof., doktor tekhn. nauk; [illegible], [illegible] CH[illegible], V.S.

Mining thin deposits with variable elements of deposition.
Sbor. nauch. trud. [illegible] no.[illegible] '63 (MIRA 17:2)

ZYMALEV, G.S., gornyy inzh.; KHIVRENKO, A.F., gornyy inzh.; RED'KO, I.A., gornyy inzh.; DYMCHUK, G.K., gornyy inzh.

Ways of reducing expenditures for mine ventilation. Gor. zhur. no. 12:10-13 D '65. (MIRA 18:12)

RED'KO, L., inzh.; GOTLIB, B., inzh.

Mechanical shovel driven by the electrical engine of a movable conveyer. Muk.-elev. prom. 27 no.7:15-16 Jl '61. (MIRA 14:7)

1. Zhitomirskoye upravleniye zagotovok.
(Shoveling machines)

RED'KO, I.A.; D'YACHENKO, V.F.

Adoption of the Yankov dolomite deposit. Ogneupory 31 no.1: 23-25 '66. (MIRA 19:1)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy zhelezorudnoy, margantsevoy, flyusovoy promyshlennosti i promyshlennosti ogneupornogo syr'ya i plavikovogo shpata.

18(5),14(5) SOV/127-59-2-3/21

AUTHORS: Gusev, A.M., Red'ko, L.A., and Infant'yev, A.N. Mining Engineers

TITLE: Preliminary Considerations Concerning the Methods of Opening, and Ways of Mining in the Yakovlevskoye Deposit Area (Proyektnyye soobrazheniya o metodakh vskrytiya i sposobakh razrabotki Yakovlevskogo mesto-rozhdeniya)

PERIODICAL: Gornyy zhurnal, 1959, Nr 2, pp 10-15 (USSR)

ABSTRACT: The authors first give a concise description of the Yakovlevskoye and Pokrovskoye iron ore deposits. The Yakovlevskoye ore stratum now being examined is 10 km long, about 220 m wide. Its thickness varies from a few meters to 350 m and it has about 1,500 million tons of 61.4% rich iron-ore. There are 6 wet strata which will give 5,000 to 6,000 cu m of water per hour when actual exploitation start. The authors say that the scheduled annual output is 15 million tons of ore. The mean exploitation coef-

Card 1/3 ficient will be 20.2 t/m^2/year. The floors will sink

Preliminary Considerations Concerning the Methods of Opening, and Ways of Mining in the Yakovlevskoye Deposit Area ...

by about 6.9 m per year. The deposits will be exhausted in about 50 years. The authors defend the plans and advice of the Yuzhgiproruda Institute as opposed to the projects elaborated by the Institut gornogo dela AN SSSR (Institute of Mining attached to the Soviet Academy of Sciences). They especially argue against adapting the one-shaft-complex plan advocated by the Academy of Sciences. The proposed floor height is 70 to 80 m. The first 40% of the ore deposits are to be mined within 25 years, the next 27% within a further 14 years. A description and illustration of the actual preparatory work in the mines follows. Miner's trucks run by electric motors will each have 25 tons capacity. As far as the actual exploitation is concerned, the authors particularly recommend the self-collapsing floor system. Drainage operations will be carried out in 3 stages: 1) deep-working pumps will first discard the pressure

SOV/127-59-2-3/21

Preliminary Considerations Concerning the Methods of Opening, and Ways of Mining in the Yakovlevskoye Deposit Area

of the subsoil waters; 2) a ring of drain shafts and galleries will be cut around the carbon limestone stratum; 3) then the ore layers will be drained. The floors placed at the bottom of the deposit must be equipped with a pumping system delivering 100 or 200 cu m of water per hour. There are 3 schematic diagrams.

ASSOCIATION: Yuzhgiproruda, Khar'kov

Card 3/3

KONONCHUK, T.I.; RED'KO, L.P.; KORCHEV, M.A.; PUSTOVIT, V.F.; BONDARENKO, N.V.

Effect of the addition of polyacrylamide to the brine on the electrolysis process with a mercury cathode. Khim. prom. 41 no.8:599-600 Ag '65. (MIRA 18:9)

L 11392-67 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) AT

ACC NR: AP7000394 SOURCE CODE: UR/0386/66/004/009/0348/0352

AUTHOR: Bresler, M. S.; Parfen'yev, R. V.; Red'ko, N. A.; Shalyt, S. S. 21

ORG: Institute of Semiconductors, Academy of Sciences SSSR, Leningrad (Institut poluprovodnikov Akademii nauk SSSR)

TITLE: Nernst effect in n-InSb in a quantizing magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 9, 1966, 348-352

TOPIC TAGS: Nernst effect, indium compound, antimonide, magnetoresistance, galvanomagnetic effect, low temperature research

ABSTRACT: This is a continuation of earlier experiments (FTT v. 8, 1776, 1966) where it was shown that quantization of the energy spectrum of the electrons of indium antimonide placed in a strong magnetic field becomes manifest at low temperatures in an oscillating field dependence of a number of kinetic coefficients. Since some of these results cannot be explained by the existing theory and call for further study, the authors have investigated the thermomagnetic Nernst effect in n-InSb. The experimental conditions (temperature, carrier density, range of magnetic fields) were such that they observed for the first time oscillations of the Nernst effect in a semiconductor, and were also able to follow continuously the sharp decrease of the Nernst coefficient in the classical region of strong fields ($uH/c \gg 1$), its transition in the region of quantum oscillations ($\xi \gtrsim \hbar \gg kT$), and the subsequent transition to the

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ACC NR: AP7000391

region of the quantum limit ($\hbar\Omega \ll \xi$) (u = mobility, ξ = chemical potential, Ω = cyclotron frequency). To determine the phase relations, the Nernst-coefficient curve was compared with the plots of the magnetoresistance and the magnetothermal emf in a transverse field and with the plot of the Hall coefficient, obtained simultaneously in the investigation of single-crystal n-InSb. The system of maxima on the plot of the Nernst coefficient A forms a periodic sequence in the reciprocal field which coincides with the periodicity of the magnetoresistance and magnetothermal-emf curves, but the oscillating Nernst-effect curve is shifted relative to the in-phase magnetoresistance and magnetothermal-emf curves in a transverse field by four periods, similar to the shift observed earlier for the magnetothermal emf in a longitudinal field. It is concluded that the results cannot be adequately interpreted theoretically until more data become available. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20/ SUBM DATE: 20Jul66/ ORIG REF: 001/ OTH REF: 001

Card 2/2 egk

REB'KO, N.I., Cand Med Sci -- (diss) "The development mechanism of experimental hypertension of central nervous origin." Khar'kov, 1959, 14 pp (Min of Health UkSSR. Khar'kov State Med Inst) 200 copies (KL, 35-59, 116)

RED'KO, N.I.

Effect of degeneration of the kidneys on the blood pressure level in dogs with experimental hypertension originating in the central nervous system. Fiziol.zhur.[Ukr.] 6 no.2:235-239 Mr-Ap '60. (MIRA 13:7)
(KIDNEYS) (HYPERTENSION)

L 12050-66 EWT(l)/EWT(m)/ETC(F)/EWG(m)/T/EWP(t)/EWP(b) IJP(c) JD/GG/AT
ACC NR: AP6002655 SOURCE CODE: UR/0386/65/002/012/0538/0541

AUTHOR: Bresler, M. S.; Red'ko, N. A.; Shalyt, S. S.

ORG: Institute of Semiconductors, Academy of Sciences SSSR, Leningrad (Institut poluprovodnikov Akademii nauk SSSR)

TITLE: Quantum oscillations of the thermoelectric power in n-InAs

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 12, 1965, 538-541

TOPIC TAGS: indium compound, Hall effect, thermoelectric power, magnetoresistance, quantum oscillation, impurity scattering

ABSTRACT: This is a continuation of a study of the oscillatory field dependence of the magnetoresistance and of the Hall coefficient of n-InAs (FTT v. 4, 1233, 1962). In this paper the authors show that quantization of the electron energy spectrum of degenerate indium arsenide placed in a strong magnetic field is manifest at low temperatures in an oscillatory dependence of the thermoelectric power on the magnetic field intensity H. They also explain some additional details of the quantum oscillations of the Hall effect, which take place at the same time. So far n-InSb is the only semiconductor exhibiting quantum oscillation of the thermoelectric power. Comparison of the magnetoresistance and the thermoelectric-power curves (Fig. 1)

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L 12050-66

ACC NR: AP6002655

made for the purpose of disclosing their phase relations shows that the maxima of both curves occur at the same field values, with a periodicity $\Delta(1/H) = 3.8 \times 10^{-5}$ oe^{-1}, which agrees well with the theoretical estimate $\Delta(1/H) = 3.7 \times 10^{-5}$ oe^{-1}. The dragging effect is manifest in the value of the thermoelectric power without the field: in the case of isotropic scattering by ionized impurities, the thermoelectric-power coefficient of the investigated sample should have been $\alpha_0 = 21$ μv/deg, as against the experimentally obtained $\alpha_0 = 56$ μv/deg. According to theory and experimental data, the action of the dragging effect should become stronger with increasing field. A large oscillation of the Hall coefficient of n-InSb was observed near the zero maximum of the transverse magnetoresistance.

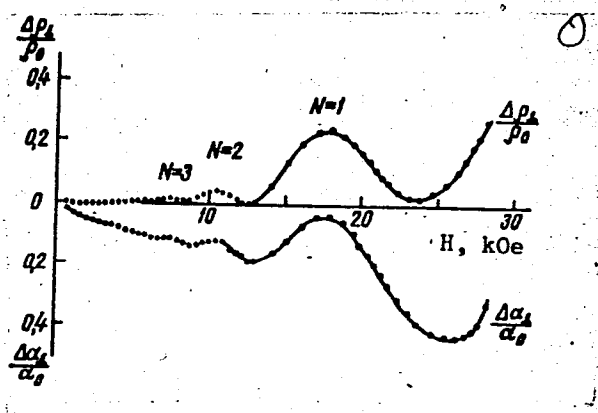

Fig. 1. Magnetoresistance ($\Delta\rho_1/\rho_0$) and magnetothermoelectric power ($\Delta\alpha_1/\alpha_0$) vs. intensity of the transverse magnetic field for polycrystalline n-InAs (2.0 x 2.8 x 50 mm) with concentration 3.4 x 10^{16} cm^{-3} and mobility 2 x 10^4 cm^2/V-sec at T ≈ 4°K.

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ACC NR: AP6002655

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Since clarification of the nature of this oscillation is of theoretical interest, the authors investigated this coefficient for n-InAs in the region of the zero maximum of the transverse magnetoresistance and found that the Hall coefficient of n-InAs exhibits near the zero maximum of $\Delta\rho_1/\rho_0$ ($H > 30$ koe) an oscillation similar (12%) to that of n-InSb, along with two other maxima at $H = 15$ and 8 koe, with smaller amplitudes. Authors thank R. V. Parfen'eva and V. M. Muzhdaba for help with the research and for a discussion of the results. Orig. art. has: 2 figures.

144, 65 144, 65

SUB CODE: 20/ SUBM DATE: 29Oct65/ ORIG REF: 004/ OTH REF: 001

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Card 3/3

L 36257-66 EWP(t)/ETI IJP(c) JD

ACC NR: AP6019276 SOURCE CODE: GE/0030/66/015/002/0745/0749 43 B

AUTHOR: Bresler, M. S.; Redko, N. A.; Shalyt, S. S. (UK)

ORG: Institute of Semiconductors, Academy of Sciences of the USSR, Leningrad

TITLE: Quantum oscillation of transport coefficients in n-type indium arsenide

SOURCE: Physica status solidi, v. 15, no. 2, 1966, 745-749

TOPIC TAGS: quantum oscillation, transport ~~coefficient~~ theory, indium arsenide, magnetoresistance, Hall coefficient

ABSTRACT: Oscillations in the magnetoresistance, Hall coefficient, and thermoelectric power in transverse and longitudinal strong magnetic fields are studied for different polycrystalline samples of n-InAs at liquid helium temperatures. Some percularities, which have also been observed in n-InSb, cannot be explained by the existing theory and need special theoretical study. The authors wish to thank R. V. Parfeniev and Yu. N. Obraztsov for stimulating discussions. Orig. art. has: 4 figures and 2 formulas. [Authors' abstract.] [KS]

SUB CODE: 20/ SUBM DATE: 18Mar66/ ORIG REF: 007/

Card 1/1

RED'KO, N.S., mladshiy nauchnyy sotrudnik

Method for calculating even load drainage. Ispol'. gaza v nar. khoz. no.2:179-186 '65. (MIRA 18:9)

1. Laboratoriya avtomatizatsii i telemekhanizatsii Saratovskogo gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta po ispol'zovaniyu gaza v narodnom khozyaystve.

REDK'KO, N.S., mladshiy nauchnyy sotrudnik

Calculating drainage at the interaction of underground structures and tracks of finite length. Ispol' gaza v nar. khoz. no.2: 187-198 '60. (MIRA 18:9)

1. Laboratoriya avtomatizatsii i telemekhanizatsii Saratovskogo gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta po ispol'zovaniyu gaza v narodnom khozaystve.

RED'KO, P.G.

Simusoidal nature of industrial alternating current. Uch zap. Ped inst Gerts. 197:231-237 '58. (MIRA 16:9)
(Electric currents, Alternating)

RED'KO, P.I., inzh.

Electric-analogy apparatus for modeling mine ventilation lines.
Bezop.truda v prom. 2 no.9:21-22 S '58. (MIRA 11:9)

1.TSentral'naya nauchno-issledovatel'skaya laboratoriya voyenizirovannykh gornospasatel'nykh chastey (VGSCh).
(Electromechanical analogies) (Mine ventilation)

ZAMYATIN, S.I. [deceased]; RED'KO, R.N.

Health resorts and curative localities of Pavlodar Province.
Trudy Inst.kraev.pat.AN Kazakh. S.S.R. 11:12-26 '62.
(MIRA 16:4)

(PAVLODAR PROVINCE--HEALTH RESORTS, WATERING PLACES, ETC.)

KORIN'KOV, K.G.; [illegible], R.K.

Characteristics of the therapeutic muds in the lakes of North Kazakhstan Province. Izv. AN Kazakh. SSR. Ser. med. nauk no.18 72-79 '64. (MIRA 17:7)

ZAMYATIN, S.I. [deceased]; ANDRYUSHCHENKO, A.F.; RED'KO, R.N.

Health resort resources of eastern Kazakhstan. Trudy Inst. kraev.pat.AN Kazakh. S.S.R. 11:3-11 '62. (MIRA 16:4)
(SEMIPALATINSK PROVINCE--HEALTH RESORTS, WATERING PLACES, ETC.)

AUTHOR: Red'ko, S. G. 57-10-25/33

TITLE: Hardness of Abrasive Tools (Tverdost' abrazivnogo instrumenta)

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 10, pp. 2381-2387 (USSR)

ABSTRACT: The investigation results on the determination of the hardness of abrasive tools according to the method of impressing the grains or by means of scratching are given. The force necessary for the impressing of the grains into a metallic rod is measured and the author determines at which intensity of the force the destruction of the bonding of the grain as well as the breaking out of the grains take place, i. e. thus the strength of the abrasive tool is determined. Based on the experiments the author states: 1.-The present standardization of the strength of abrasive tools must be put down more exactly. It would be useful to put up a linear dependence. This would have to be expressed in terms of the force necessary to remove a single grain from the binding. The strength change for abrasive tools with different structure had to be carried out according to a linear law with an angular coefficient. 2.-the method given here differs from the existing methods by the fact that its measuring unit corresponds to the general physical conception on the strength of abrasives, as a force, necessary for the removal of a grain from the bond. The other

Card 1/2

methods only supply abstract indices. 3.-the sensitivity of the method is characterized by the stability of the results as well as by the possibility to easily differentiate the abrasive tools of various strength. The exactness of the sand-blast machine according to GOST 3751-47 (Russian Standards) which is very widely used at present, is very small.
There are 7 illustrations and 6 Slavic references.

SUBMITTED: September 3, 1956

AVAILABLE: Library of Congress

RED'KO, S.G., kand.tekhn.nauk, dotsent; SHATALIN, V.A., aspirant

Effect of curvature on contact stresses. Izv.vys.ucheb.zav.; mashinostr. no.4:92-105 '62. (MIRA 15:7)

1. Saratovskiy politekhnicheskiy institut.
(Strains and stresses)

[redacted], dokt. tekhn. nauk, [redacted], inzh.

Characteristics of the process of high-speed reaming of holes in low-carbon steels. Izv. vys. ucheb. zav., mashinostr. no.7:147-152 '65. (MIRA 18:12)

1. Saratovskiy politekhnicheskiy institut. Submitted October 7, 1964.

RED'KO, S.G., doktor tekhn. nauk; BASKOV, L.V.

Increasing the durability of parts by mechanical surface hardening. Mashinostroitel' no.11:28-29 N '64 (MIRA 18:2)

L 32121-66 EWP(k)/EWP(t)/EWT(m)/ETI LJP(c) JD/GD

ACC NR: AT6010487 SOURCE CODE: UR/0000/65/000/000/0031/0037

AUTHOR: Red'ko, S. G. (Doctor of technical sciences, Professor); Pomel'tsov, N. V. (Aspirant)

ORG: none

TITLE: Some theoretical problems in wrap-around grinding

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. Obrabotka metallov rezaniyem i davleniyem (Machining and pressure working of metals). Moscow, Izd-vo Mashinostroyeniye, 1965, 31-37

TOPIC TAGS: metalworking, machine grinding, metal finishing

ABSTRACT: The paper deals with a study of certain aspects of the high-speed wrap-around method of grinding. This method, since it is free of the normal limitations imposed by wheel coupling rigidity, permits grinding rates of from 115 to 135 m/sec. Mathematical expressions are derived for productivity ratios in this kind of grinding. Equations are analyzed which make it possible to determine the length of the wheel contact arc as a function of various other factors. In this way the author succeeds in establishing certain general laws with respect to high-speed wrap-around grinding, demonstrating, in particular, that the best results in terms of increased productivity are obtained when grinding pieces which are large in diameter, and that the diameter of the wheel should not exceed the diameter of the worked piece by more than 2.5 times. Orig. art. has: 4 figures and 13 formulas.

SUB CODE: 13 / SUBM DATE: 08Jul65 / ORIG REF: 005

Card 1/1 af

RED'KO, V.M.; ZIMENKOV, I.A.

Hand-operated small worm tackle. Suggested by V.M.Red'ko, I.A.Zimenkov. Rats. i izobr. predl. v stroi. no.15:55-56 '60. (MIRA 13:9)

1. Po materialam Stroitel'no-montazhnogo upravleniya No.203 tresta Metallurgmontazh Ministerstva stroitel'stva USSR.
(Hoisting machinery)

1. RED'KO, S. G.

2. USSR (600)

4. Measuring Instruments

7. Device for measuring a fraction of a micron. Stan.i instr. 23 no. 12, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

RED'KO, S. G.

Turning

Turning with vibrating cutting tools. Stan. i instr. 24, no. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

RED'KO, S. G.
USSR/Engineering - Polishing Methods

Card 1/1

Author : Red'ko, S. G.

Title : Some Physical Phenomena Appearing in the Polishing Process

Periodical : Stan. i Instr. Ed. 1, 13-15, Jan/1954

Abstract : An analysis was made of the phenomena of heat exchange during polishing of metals. Studies on heat characteristics, and graphs on the line of deflection of metal plates and shafts, polished under various conditions are also presented. Graphs; Illustrations; Drawings.

Institution : .....

Submitted : .....

Evaluation B-81417

RED'KO, S.G., kand.tekhn.nauk, dotsent

Generation of heat in grinding metals. Trudy SADI no.16 pt.1:24-39 '59. (MIRA 13:11)

(Grinding and polishing)

RED'KO, S.G.

Standards of the instrument industry. Stan. i instr. 30 no.2:24a-24d F '59. (MIRA 12:3)
(Standards, Engineering)

RED'KO, S.G.

Calculating temperature of surfaces subjected to grinding. Stan. i instr. 30 no.2:26-29 F '59. (MIRA 12:3)
(Grinding and polishing)

RED'KO, S.G.

Number of abrasive grains of grinding wheels taking part in cutting.
Stan.i instr. 31 no.12:10-12 D '60. (MIRA 13:11)
(Grinding wheels)

RED'KO, S.G.; BERDICHEVSKIY, Ye.G.; FILIMONOVA, Ye. A.

Using high-concentrated emulsions in honing hardened steels. Stan. i instr. 36 no. 12:12-13 D '65 (MIRA 19:1)

REDʹKO, S. I.

Author of an article, "The Most Important Task of the Sovkhoz Veterinary Workers."

SO: Veterinariya; Vol. 29; No. 6; 3-7; June 1952 Unclassified.
Trans. 760 by L. Lulich

RED'KO, S.M.

Diagnosis and surgical therapy of diaphragmatic hernias. Khirurgiia, Moskva no.1:55-57 Ja '55. (MLRA 8:9)
(HERNIA, DIAPHRAGMATIC, diag. & surg.)

RED'KO, S.M.

Primary cancer of the small intestine. Vest.khir. 75 no.4:134-136 My '55. (MLRA 8:8)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav.-prof. B.V.Petrovskiy) 2-go Moskovskogo meditsinskogo instituta im. I.V.Stalina i iz 2-y Gorodskoy klinicheskoy bol'nitsy. Moskva, Zubovskiy bul'var, d. 12, kv. 1.
(INTESTINE, SMALL, neoplasms, primary, surg.)

RED'KO, S.M.

Repeat operations on the bile ducts. Vest.khir. 85 no.11:26-32 N '60. (MIRA 14:2)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. A.A. Busalov) 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta im. N.I. Pirogova i 1-go khirurgicheskogo otdeleniya 2-y Gorodskoy klinicheskoy bol'nitsy (glavnyy vrach - A.N. Lobanova).
(BILE DUCTS--SURGERY)

RED'KO, S.M.

Cholangiography in surgery of the biliary tract. Sov. med. 25 no.10: 42-49 O '61. (MIRA 15:1)

1. Iz kliniki fakul'tetskoy khirurgii (dir. - prof. A.A.Busalov) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova i iz khirurgicheskogo otdeleniya Gorodskoy klinicheskoy bol'nitsy No.2 (glavnyy vrach A.N.Lobanova).
(BILE DUCTS--RADIOGRAPHY) (GALL BLADDER--RADIOGRAPHY)
(BILIARY TRACT--SURGERY)

RED'KO, S.M.

Rare form of structure of the extrahepatic bile ducts. Vest. khir. no.5:105-106 '62. (MIRA 15:11)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. A.A. Busalov) 2-go Moskovskogo meditsinskogo instituta im. N.I. Pirogova i 3-go khirurgicheskogo otdeleniya gorodskoy klinicheskoy bol'nitsy No.1 im. N.I. Pirogova (gl. vrach - zasluzh. vrach RSFSR L.D. Chernyshev).
(BILE DUCTS--ABNORMITIES AND DEFORMITIES)

RED'KO, S.M.

Apropos of the article by A.G. Guksian, I.A. Komarova and G.I. Rtskhiladze "Etiological and clinical problems in cancer of the gall bladder." Terap.arkh. 34 no.2:109-112 '62.

(MIRA 15:3)

1. Iz kliniki fakul'tetskoy khirurgii (dir. - prof. A.A. Busalov) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i iz 3-go khirurgicheskogo otdeleniya gorodskoy klinicheskoy bol'nitsy No.1 imeni N.I. Pirogova (glavnyy vrach - zasluzhennyy vrach RSFSR L.D. Chernyshov).

(GALL BLADDER--CANCER) (GUKASIAN, A.G.)
(KOMAROVA, I.A.) (RTSKHILADZE, G.I.)

RUSALOV, A.A., prof.; REDʹKO, ..M.

Acute cholecystitis in elderly and senile persons. Trudy Inst. im. N.V. Sklif. 9:51-59 '63. (MIRA 18:6)

1. Iz kliniki fakulʹtetskoy khirurgii 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni Pirogova (dir. kliniki prof. A.A. Rusalov) i iz 3-go khirurgicheskogo otdeleniya Moskovskoy gorodskoy klinicheskoy bolʹnitsy No.1 imeni Pirogova (glavnyy vrach - zasluzhennyy vrach RSFSR L.D. Chernyshev).

L 24273-66 EWT(1)/EWT(m)/EPF(n)-2/EWP(t) IJP(c) JD/WW/JG

ACC NR: AP6006993 SOURCE CODE: UR/0051/66/020/002/0197/0208

AUTHORS: Penkin, N. P.; Redko, T. P.

ORG: none

TITLE: Investigation of the positive column of a discharge in cadmium vapor and determination of the effective cross sections of the 6^3S_1 level

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 197-208

TOPIC TAGS: cadmium, nuclear energy level, discharge plasma, positive column, plasma electron temperature, electron distribution, electron density, electric discharge ionization

ABSTRACT: The populations of the $5^6P_{0, 1, 2}$, 5^1P_1, and 6^3S_1 levels of the cadmium atom were investigated in the positive column of a discharge in the pressure range (1 -- 8) x 10^{-2} mm Hg and at discharge currents from 50 to 200 mA. The dependence of the population of

Card 1/3 UDC: 539.182.2 + 537.523/.527:546.48

these levels on the discharge conditions were studied by different optical methods (Rozhdestvenskiy hook method, spectral line reversal, and emission). The electron temperature and the electron density in the plasma were determined by a method using probes, as well as the electron energy distribution. At a cadmium vapor pressure $\leq 10 \times 3^{-2}$ mm Hg and a current ≤ 0.2 A/cm^2 the discharge was not in equilibrium, and the populations of the levels were much lower than the Boltzmann population. At the same pressure, the electrons have a Maxwellian energy distribution, with the usual variation of the electron density and electron temperature with the discharge current at constant pressure. A stepwise excitation, involving transitions from $5^3P_{0,\ 1,2}$ levels plays a large role in the excitation of both the singlet and triplet-cadmium-atom levels. The ionization of the cadmium atoms occurs mainly by a stepwise process. The saturation of the plot of the population of the levels against the discharge current is due to the stepwise excitation and the ionization. The effective cross sections for the direct and stepwise excitations of the 6^3S_1 levels by electron collisions were determined accurate to 50%

L 24273-66
ACC NR: AP6006993

and the stepwise cross section was approximately 1-1/2 orders of magnitude higher than the direct-excitation cross section, the corresponding values being 5×10^{-18} and 2×10^{-16} cm^2. Orig. art. has: 13 figures, 8 formulas, and 3 tables.

SUB CODE: 20/ SUBM DATE: 07Jul64/ ORIG REF: 012/ OTH REF: 004

Card 3/3dda

SOV-107-58-8-12/53

AUTHOR: Red'ko, V., Head of the Gomel' Oblast Radio Club (DOSAAF)

TITLE: Our Campaign in the Villages Around Gomel' (Nash reyd v poselki Gomel' shchiny)

PERIODICAL: Radio, 1958, Nr 8, p 10 (USSR)

ABSTRACT: The members of the Gomel' Radio Club have arranged exhibitions of their work, recruited members and founded radio circles in the Kolkhoz "Kosomol Gomel'shchiny" and the sovkhoz "Kommunar".

1. Radio--USSR

Card 1/1

PENKIN, N.P.; RED'KO, T.P.

Relative oscillator strengths of some lines of zinc iodide and cadmium iodide. Opt. i spektr. 9 no.5:680-682 N '60.
(MIRA 13:11)

(Zinc iodide--Spectra) (Cadmium iodide--Spectra)

L 57484-65

ACCESSION NR: AP5015117 UR/0371/65/000/003/0114/0124

AUTHOR: Zaznova, N. Ye.; Red'ko, V. A.

TITLE: The influence of nonlinear element asymmetry on the operation of a resistive parametron

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 3, 1965, 114-124

TOPIC TAGS: asymmetric resistive parametron, asymmetric nonlinear element, parametron element, parametron function

ABSTRACT: The operation of resistive parametrons with symmetrical elements is well understood (see, e.g., V. A. Red'ko, Avtomat. i vychisl. tekhn., 7, Riga, 1964; N. Ye. Zaznova, A.P. Kilup, V.A. Red'ko, Avtomat. i vychisl. tekhn., 8, Riga, 1964). This paper shows that the control of a parametron with asymmetric nonlinear elements is greatly affected by the asymmetry of the circuit, and that the effects are often significantly larger than those due to noise and residual voltages. The calculations of the minimum magnitude of the control signal are given and the theoretical deductions are checked by actual calculations of the basic differential equation

$$\frac{d^2u}{d\tau^2}+\frac{\rho}{4\nu}\frac{d}{d\tau}[f_1(e+u)-f_2(e-u)]+\frac{1}{\nu Q}\frac{du}{d\tau}+\frac{1}{\nu^2}u=0. \qquad (1)$$

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ACCESSION NR: AP5015117

0

with $$\omega_0=\frac{1}{\sqrt{4L\left(C_2+\frac{C_1}{2}\right)}};\quad \rho=\sqrt{\frac{4L}{C_2+\frac{C_1}{2}}};\quad Q=\frac{R}{\rho};\quad \nu=\frac{\omega}{\omega_0};\qquad (0)$$

(symbols in (0) have the standard meaning). Results show that in the case of asymmetry the exit voltage of the parametron contains a strong pumping frequency component. In the absence of external interaction, this component determines the initial conditions within the circuit and, consequently, the phase of parametron oscillations. The parametron must, therefore, be controlled by a signal sufficient for the compensation of this component. Fast parametrons are the most affected by asymmetry. "The authors thank Prof. K.M. Polivanov for the scientific guidance of the work." Orig. art. has: 35 formulas and 5 figures.

ASSOCIATION: Institut elektroniki i vychislitel'noy tekhniki AN Latv. SSR (Institute for Electronics and Computer Technology, AN Latv. SSR)

SUBMITTED: 30Dec64 ENCL: 00 SUB CODE: IE, DP

NO REF SOV: 007 OTHER: 000

L 8246-66 EWI(1)/EWA(h)
ACC NR: AR5014364 SOURCE CODE: UR/0271/65/000/005/B050/B050

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika. Svodnyy tom, Abs. 5B372

AUTHOR: Red'ko, V. A.

TITLE: Transient processes in resistive parametrons

CITED SOURCE: Izv. AN LatvSSR. Ser. fiz. i tekhn. n., no. 5, 1964, 97-106

TOPIC TAGS: parametron, resistive parametron, transient process

TRANSLATION: An accurate analysis of transient phase-and-amplitude processes in the resistive parametron is presented. Amplitude and phase equations are set up, and characteristics of stable boundary cycles are developed. The transient time for higher $\rho \operatorname{tg} \varphi$ (ρ is the characteristic resistance of the parametron, $\operatorname{tg} \varphi$ is the average differential conductance within the negative-transconductance segment of the nonlinear-element characteristic) may be shorter than the natural-oscillation period, which makes resistive parametrons promising. With small signal amplitude, the phase is established quicker than the amplitude of excited oscillations. In the optimal-phase region, the rate of transient process only slightly depends on the signal parameters and detuning. The relations between the rate of transient process and the nonlinear-element characteristics is investigated as are the problems of noise rejection. Bib. 4, figs. 5.

SUB CODE: 09/ SUBM DATE: 00

UDC: 681.142.67:621.385

Card 1/1

L 8526-66

ACC NR: AT5027528 SOURCE CODE: UR/2690/65/008/000/0195/0207

AUTHOR: Zaznova, N.Ye.; Kilyup, A.P.; Red'ko, V.A. 48 B+1

ORG: Institute of Electronics and Computer Technology AN LatSSR, Riga (Institut elektroniki i vychislitel'noy tekhniki)

TITLE: Digital computer analysis of transient processes in tunnel parametrons

SOURCE: AN LatSSR. Institut elektroniki i vychislitel'noy tekhniki, Trudy, v. 8, 1965. Avtomatika i vychislitel'naya tekhnika, 195-207

TOPIC TAGS: digital computer, computer application, computer component, semiconductor device

ABSTRACT: This article analyzes the transient processes in tunnel-diode parametrons. The authors describe the methods and give the results of digital computer calculations of a tunnel parametron. The theoretical conclusions were tested experimentally. Results show that 1) the most important characteristic determining the operation of the tunnel parametron is ρ tg φ (tg φ is the average differential conductivity of the negative slope segment; $\rho = \sqrt{L_{osc}/C_{osc}}$); for small values of this quantity the oscillations are close to simple harmonic ones, while for larger values, the oscillations exhibit a relaxation character; 2) high ρ tg φ circuits are fast and quite insensitive to the interaction frequency or self-losses; 3) the rise time may be shortened if the excitation radio pulse phase is adjustable in such a way that the diodes may enter during the first half period the negative slope region; 4) the

Card 1/2 UDC: 621.382.233.621.372.45

L 8526-66
ACC NR: AT5027528

damping time is shortened if the excitation is turned on when the energy stored in the circuit is a minimum; 5) with the increase in bias, the oscillation rise time increases and the damping time decreases; 6) the rise time is at a minimum for a certain optimum excitation voltage; 7) when approaching the critical values of the parameters (beyond which the oscillations cannot be excited) the rise time increases rapidly; and 8) the analytic solution presented in earlier papers gives a faithful qualitative pattern of parametron operation but cannot be utilized for the estimate of operation near the critical point. Orig. art. has: 33 formulas and 9 figures.

SUB CODE: EC,DP / SUBM DATE: none / ORIG REF: 005

Card 2/2

L 31116-65 EWT(1)/EWA(h) Pm-4/Peb

ACCESSION NR: AT5000976 S/2690/64/006/000/0181/0203

15
13
B+1

AUTHOR: Red'ko, V. A.

TITLE: Potentialities of parametric resonators having a nonlinear resistor with a negative portion in their current-voltage characteristic

SOURCE: AN LatSSR. Institut elektroniki i vychislitel'noy tekhniki. Trudy, v. 6. Riga, 1964. Avtomatika i vychislitel'naya tekhnika (Automation and computer technology), no. 7, 181-203

TOPIC TAGS: parametric resonator, parametron

ABSTRACT: The principal circuit diagram (see Enclosure 1) of the parametric resonator in question comprises two tunnel diodes D_1 and D_2, an inductance T_1, and a voltage source e producing both the bias voltage E_0 and the pumping voltage U_p whose frequency is twice as high as the natural frequency of the circuit. This equation:

$$\frac{d^2U}{d\tau^2}+U=\left(1-\frac{1}{\nu^2}\right)U+\frac{\rho}{2\nu}\cdot\frac{d}{d\tau}(\alpha_1U-2\alpha_2U_pU-3\alpha_3U_p^2U-\alpha_3U^3)$$

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L 31116-65

ACCESSION NR: AT5000976

describes phenomena in the resonator. A solution of this equation yields two trunkated equations for the derivatives of amplitude and phase; the latter are used for investigating the operating point, boundary cycles, and their stability; regions of bias and pumping where parametric oscillations can exist, frequency characteristics, and rise of oscillations are also explored. It is found that: (1) If the operating point lies on the negative portion of the current-voltage characteristic, self-oscillations may arise; (2) In the closed regions of bias lying within the positive-transadmittance section, excitation of 2:1-frequency parametric oscillations is possible; (3) The necessary condition of these parametric oscillations is that the pumping-voltage amplitude swings into the negative-transadmittance section; (4) In terms of pumping, the region of existence of these oscillations is closed; (5) The oscillations with a phase shift of 180° are equally probable which makes the circuit applicable for computer purposes; (6) The circuit can also be used as a 4-stable-state element; (7) The rise time of the oscillations is about one cycle; (8) The article does not describe

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ACCESSION NR: AT5000976

hard-excitation conditions which may exist in real circuits. The investigation was carried out under the direction of Professor K. M. Polivanov. Orig. art. has: 4 figures and 95 formulas.

ASSOCIATION: Institut elektroniki i vychislitel'noy tekhniki AN LatSSR (Institute of Electronics and Computer Technology, AN LatSSR)

SUBMITTED: 00 ENCL: 01 SUB CODE: EC, DP

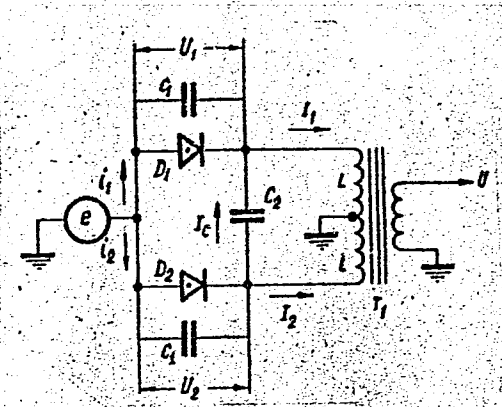
NO REF SOV: 009 OTHER: 001

Card 3/4

L 31116-65

ACCESSION NR: AT5000976

ENCLOSURE: 1



Principal circuit of the parametric resonator

Card 4/4

ZIMENKOV, I.A.; RED'KO, V.M.; TITOVSKIY, F.I.; PILYUGINA, I.I.; SAVUN, N.M.

Hydraulic press for stamping spherical bottoms of containers. Suggested by I.A.Zimenkov, V.M.Red'ko, F.I.Titovskii, I.I. Piliugina, N.M.Savun. Rats. i izobr. predl. v stroi. no.15:39-40 '60. (MIRA 13:9)

1. Po materialam tresta Metallurgmontazh Ministerstva stroitel'stva USSR.
(Hydraulic presses) (Containers)

RED'KO, V.N.

Some problems of language theory. Kibernetika no. 4:12-21 Jl-Ag '65. (MIRA 18:12)

1. Submitted February 19, 1965.

RED'KO, V.N. (Kiyev)

Determining set of relations in algebra of regular events.
Ukr. mat. zhur. 16 no.1:120-126 '64. (MIRA 17:5)

RED'KO, V.N. (Kiyev)

Algebra of commutative events. Ukr. mat. zhur. 16 no.2:185-195 '64. (MIRA 17:3)

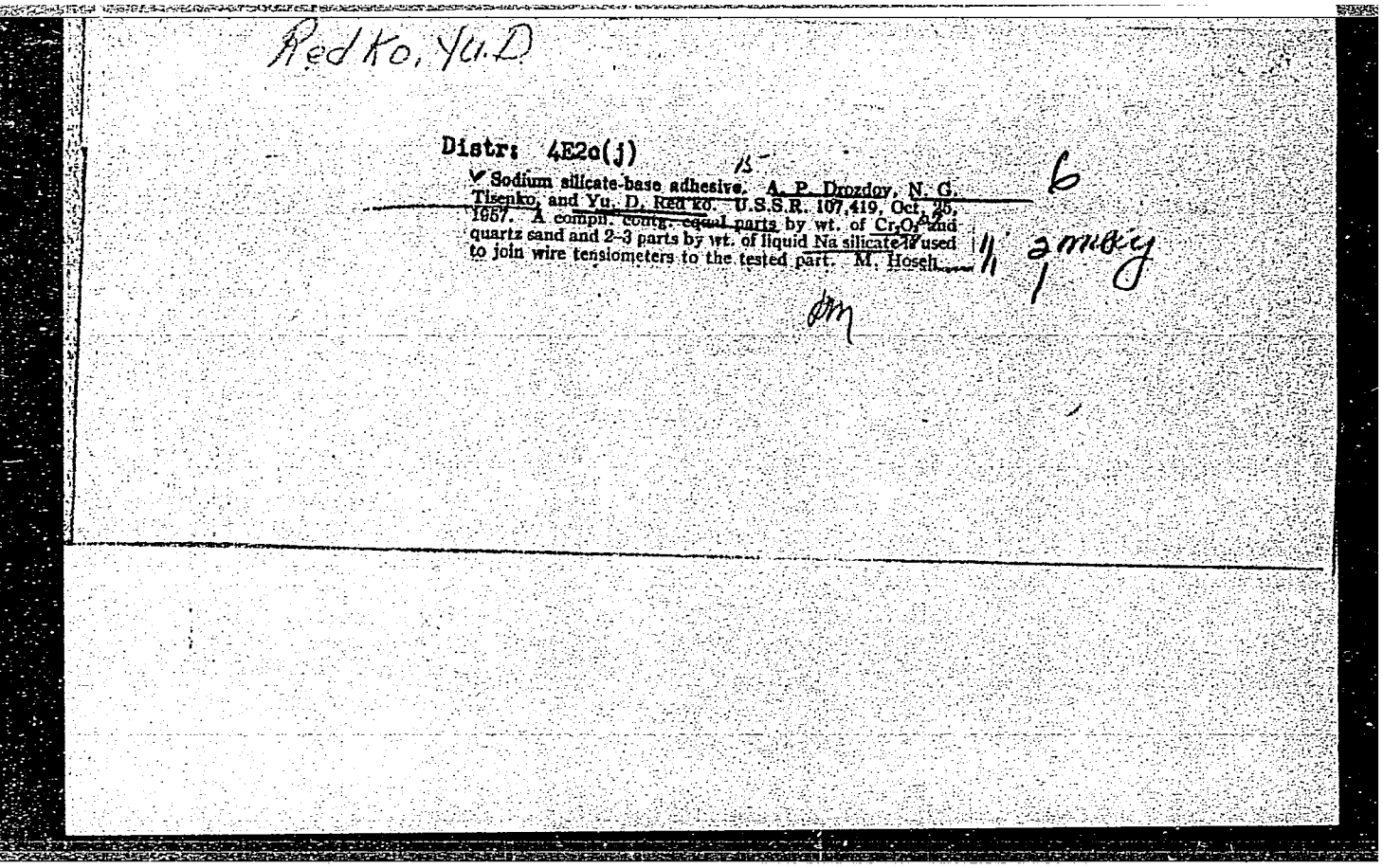
REDʹKO, Yu. D.

"Corrosion of Condenser Pipes on Maritime Electric Power Stations," p. 127 of Problems of Sea Corrosion, 1951.

Book W-22365, 14 Apr 52

Red'ko, Yu. D.

The oxidation of 3% chrome molybdenum steel in water vapor and in air. V. V. Ipat'ev, V. V. Sibirskaya, M. G. Taubina, Yu. D. Red'ko, and V. I. Tikhomirov. *Uchenye Zapiski Leningrad. Gosudarst. Univ. No. 175, Ser. Khim. Nauk* No. 14, 155–6(1954).—The oxidation of steel (3.2% Cr, 0.2% C, 0.5% Mo) was studied in the temp. range 500–980°. FeO formation is negligible below 600° but becomes the most important component of the oxidized layer at $T > 800°$. Other oxidation products are Fe_2O_3 and R_2O_3 (chrome spinel). At low temps. the oxidation rate is $^1/_{15}$ that of Armco iron. At high temps. this difference disappears almost completely. Steam atm. cause a higher oxidation rate than does relatively dry air. —C. H. Fuchsman



Redko, Yu. D.

Distr: 4E2o(j)

Sodium silicate-base adhesive. A. P. Drozdov, N. G. Tisenko, and Yu. D. Redko. U.S.S.R. 107,419, Oct. 25, 1957. A compn. contg. equal parts by wt. of Cr_2O_3 and quartz sand and 2-3 parts by wt. of liquid Na silicate is used to join wire tensiometers to the tested part. M. Hoseh.

REDKO, IU.I. [Redko, Yu.I.]

Water glass determination. Ratsionalizatsiia 13 no.12:16-17 '63.

SOV/137-58-7-14060

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 11 (USSR)

AUTHORS: Sigov, A. A., Red'ko, Yu. I.

TITLE: Sintering of Krivoy Rog Ores With Various Amounts of Air Suction (Aglomeratsiya krivorozhskikh rud pri razlichnom kolichestve prosasyvayemogo vozdukha)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1957, Vol 20, pp 209-227

ABSTRACT: Sintering is performed on a sintering machine, a diagram of which is adduced. The function of suction fan (F) is performed by a powerful aircraft supercharger with which the amount of suction air can be regulated within wide limits. In the first series of experiments, the F functioned at normal rpm and a vacuum of 580-630 mm water. In the second series of experiments, the vacuum was 1150 mm water, and a considerably larger amount of air was sucked through the charge. Sintering was also performed at ~1600 mm water vacuum. The concepts hitherto existing as to the excess air factor α in sintering prove to be excessive. The pores in the Krivoy Rog ores mix show an overall α of 1.4-1.5 during the sintering process as a whole, and more often of 1.21. The total amount of air sucked through

Card 1/2

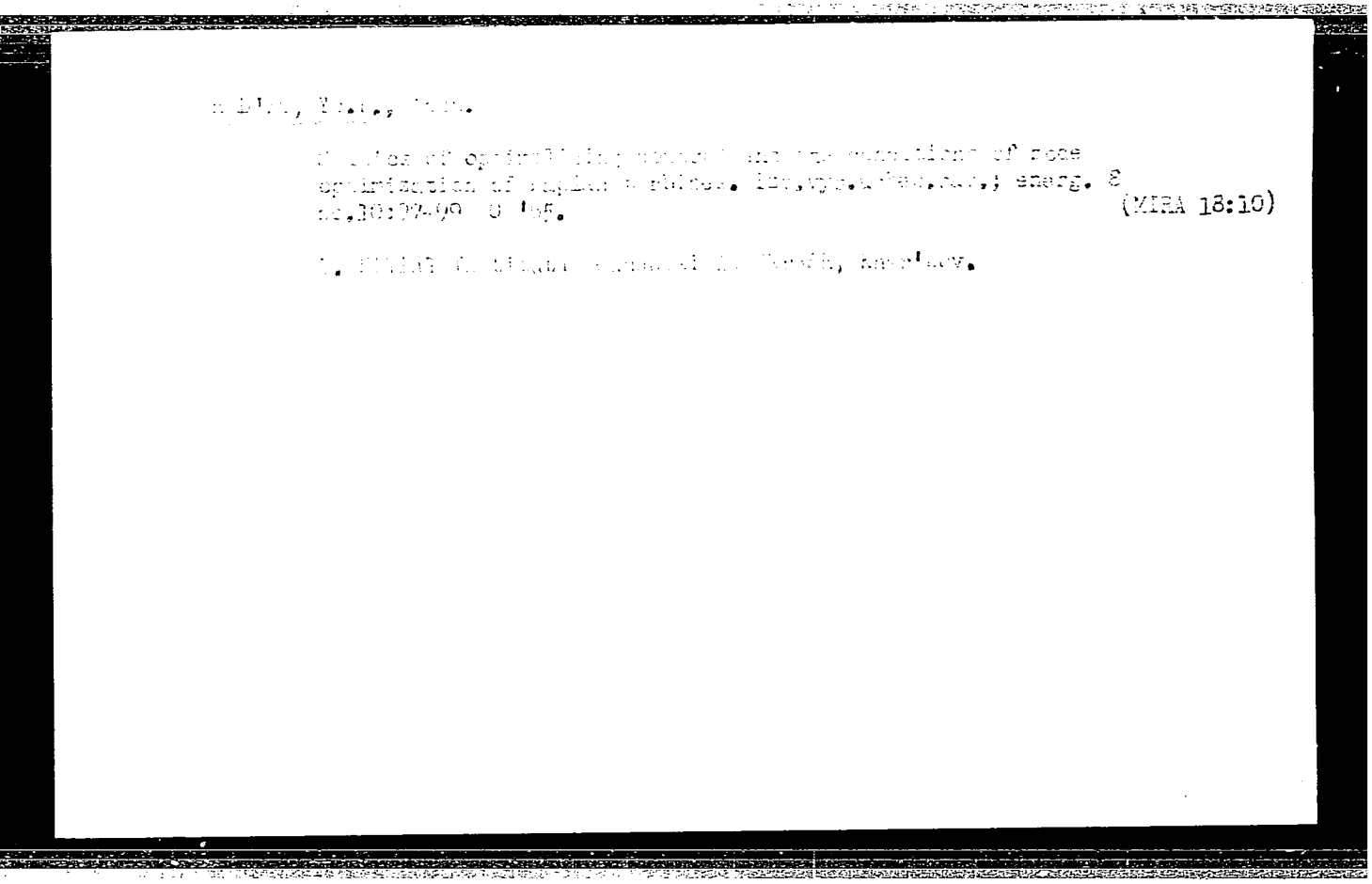
Sintering of Krivoy Rog Ores with Various Amounts of Air Suction

by the F is significantly increased by parasite air taken in from various sources (40-50% of the total quantity of gases). The total excess air for the period from the start of the process to the moment of maximum temperature increase in the waste gases is ~2.7-3.0, and is practically independent of the amount of air taken in per min and the magnitude of the initial vacuum. α varies markedly during the sintering process, attaining a maximum at the end of the process as the C residue burns to completion at the bed. The increase in F power makes for a corresponding increase in the rate at which the zone of combustion moves down, i.e., shortens the duration of the process. The downward motion of the zone of carbon combustion is directly proportional to the amount of air sucked through per min.

A. Sh.

1. Ores--Sintering 2. Sintering furnaces--Operation 3. Supercharges --Applications

Card 2/2



RED'KO, Z.Yu.

Chernov, V.I., Red'ko, Z.Yu., and Melamud, M.G."On defects in the work of the spa-selection commission", Vracheb. delo, 1949, No. 1, paragraphs 75-78.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9,1949)

RED'KO, Yu.I.

SIGOV, A.A., kand.tekhn.nauk; RED'KO, Yu.I., inzh.

Sintering Krivoi Rog ores in air blasts of differing amounts. (MIRA 11:3)
Izv. KPI 20:209-227 '57.
(Sintering) (Krivoi Rog--Iron ores)

ZHAROV, N.T.; KUSHCH, M.M.; RED'KO, Yu.I.

Introducing automatic control of loam mixture feeding in foundries.
Lit.proizv. no.7:17-20 Jl '61. (MIRA 14:7)
(Sand, Foundry) (Automatic control)

KUSHCH, M.M., inzh.; REN'KO, Yu.I., inzh.

Pneumatic sand conveying at the "Krasnyi Ekskavator" Plant.
Mashinostroenie no.2:50-52 Mr-Ap '65. (MIRA 18:6)

L 3608-66 EWT(1)/EWP(m)/EWA(1)/ECS(k)

ACCESSION NR: AP5024045 UR/0057/65/035/009/1652/1657 49

533.9.07

AUTHOR: Redkoborodyy, Yu. N.; Fedulov, V. I. 44,55

TITLE: Bolometric measurements of the radiation of an ionized shock wave in argon

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 9, 1965, 1652-1657

TOPIC TAGS: plasma shock wave, argon, plasma radiation, bolometer, recombination radiation

ABSTRACT: The authors have measured the radiation from reflected shock waves with Mach numbers between 7 and 11 in argon at 10 mm Hg. The shock waves were produced in an electric discharge shock tube which was provided with a lithium fluoride glass window at the far end. A bolometer mounted outside this window recorded on an oscilloscope the radiation from the reflected shock wave. The bolometer was similar to the instrument described by L.L.Gorelik (ZhTF, 34, 496, 1964); it had a resolving time of 10 microsec and an equilibration time of 0.1 sec. The surface of the bolometer was blackened by depositing aluminum on it in a nitrogen atmosphere at 1 mm Hg; this increased the sensitivity by a factor 7. The radiation intensity of the shock wave plasma was calculated from the bolometer readings recorded during approximately the first 100 microsec after the reflection; preliminary calcula-

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ACCESSION NR: AP5024045 15

tions indicated that the layer of plasma involved would be optically thin, and this was confirmed by the measurements. The measured radiation intensities were compared with values calculated with the theory of F.H.Mies (J. Chem. Phys., 37, No.5, 1963). Only recombination radiation was taken into account in the calculations, preliminary estimates having indicated that the bremsstrahlung and line spectrum intensities would be negligible. When the logarithms of the measured intensities were plotted against the reciprocals of the corresponding temperatures, the points fell near a straight line that was parallel to but somewhat below the theoretical curve. This discrepancy is ascribed to incorrect temperature determination; the velocity of the shock wave was measured at some distance from the window and its decrease with increasing age of the wave was neglected. Comparison of the measured radiation intensities with enthalpies of argon indicate that in the theory of argon shock waves radiative energy losses can be neglected at temperatures up to 10 000 °K but must be taken into account at higher temperatures. "In conclusion, we thank L.L.Gorelik and V.V.Sinitsin for valuable advice and discussions, V.I.Kogan and A.I.Karchevskiy for very signigicant remarks which enabled us to improve the quality of the work, and V.I.Nikolayev for assistance in fabricating the bolometers." Orig. art. has: 7 formulas and 2 tables.

Card 2/3

L 3608-66

ACCESSION NR: AP5024045

ASSOCIATION: none

SUBMITTED: 17Dec64 ENCL: 00 SUB CODE: ME, NP

NO REF SOV: 008 OTHER: 003

Card 3/3

GORELIK, L.L.; REDKOBORODYY, Yu.N.; SINITSYN, V.V.

Effect of a magnetic field on the heat conductivity of gases with nonspherical molecules. Zhur. eksp. i teor. fiz. 48 no.2:761-765 F '65. (MIRA 18:11)

REDKOBORODYY, Yu.N.; FEDULOV, V.I.

Bolometric measurements of the radiation from argon ionized by a shock wave. Zhur. tekh. fiz. 35 no.9:1652-1657 S '65. (MIRA 18:10)

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AUTHOR: Gorelik, L. L.; Redkoborodyy, Yu. N.; Sinitsyn, V. V.

TITLE: The effect of a magnetic field on thermal conductivity of gases with nonspherical molecules

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TOPIC TAGS: nonspherical molecules, thermal conductivity, gas thermal conductivity, nitrogen, carbon monoxide, carbon dioxide, hydrogen, deuterium

ABSTRACT: Results of investigations of the effect of nonspherical molecules in N_2, CO, CO_2, H_2 and D_2 are briefly reported. The mean rotary magnetic moments μ_r determined on the basis of these experiments, and data on the nonsphericity of these molecules are given in table 1 and figs. 1-4 of the Enclosure. "The authors express gratitude to I. K. Kikoin, Yu. M. Kagan, L. A. Maksimov, V. Andriyako and A. A. Sazykin for valuable discussion, V. Kh. Volkov for interest and assistance in the work, V. I. Nikolayev for assistance in preparation of the instruments and S. A. Repin for furnishing the carbon monoxide gas." Orig. art. has: 4 figures, 1 table, 2 formulas.

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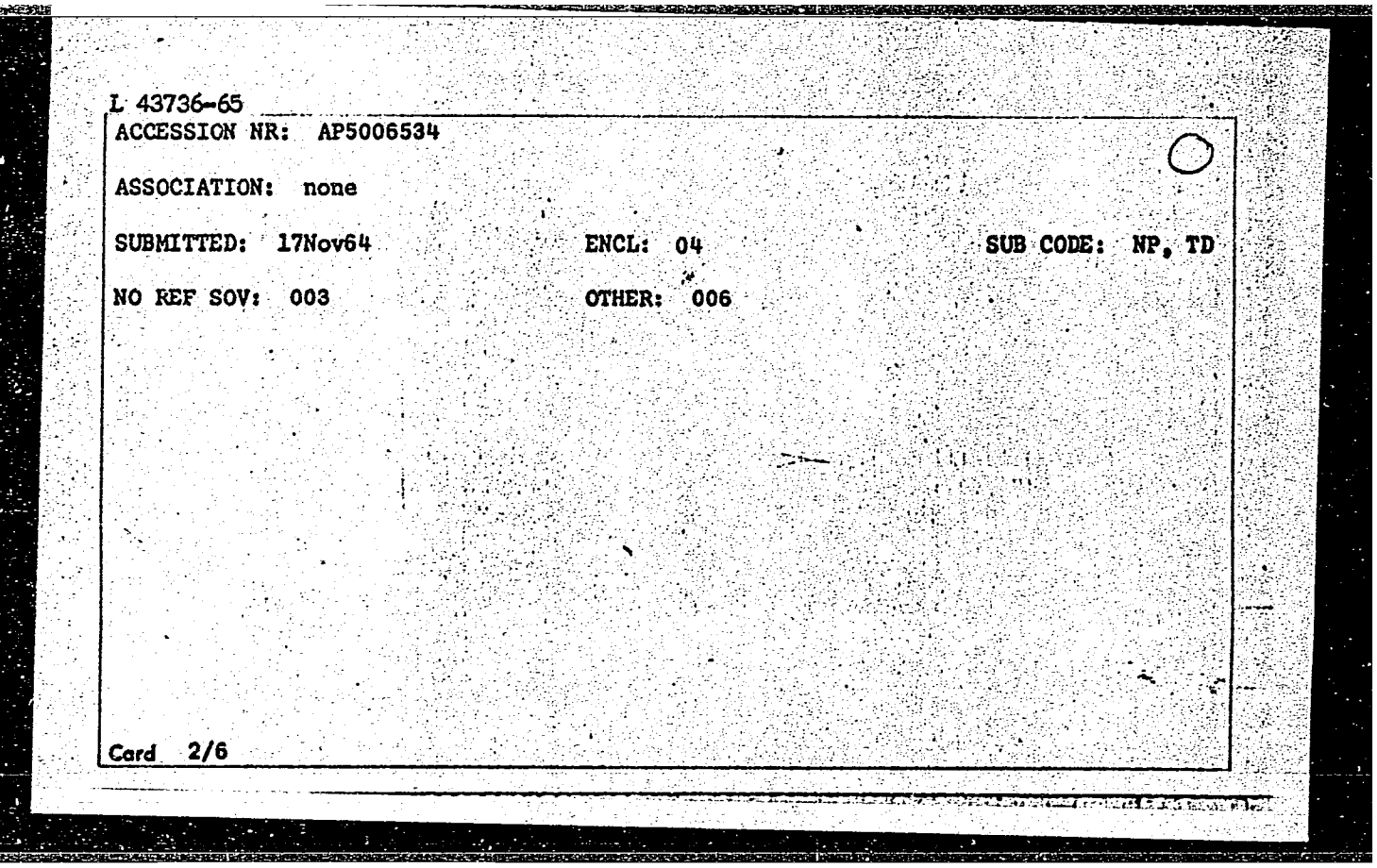

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